



ROLL THE DICE

TRANSFORMATIONS

- ***STUDENTS WILL COMPLETE A SERIES OF 6 TRANSFORMATIONS BY ROTATING AROUND THE DIFFERENT STATIONS OF THE RAINBOW ROLL THE DICE TASK***
- ***ACTIVITY CAN BE DONE AS SMALL GROUP ON A POSTER OR INDIVIDUALLY ON A COORDINATE PLANE***
- ***EACH COLOR OF THE RAINBOW HAS ITS OWN SET OF ROLL THE DICE RULES***
- ***A GALLERY WALK CAN BE DONE AT THE END WITH THE PROVIDED QUESTIONS***



ROLL THE DICE

TRANSFORMATIONS


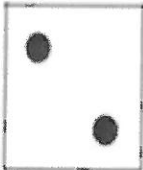
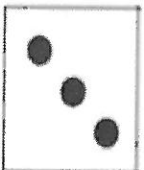
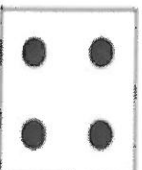
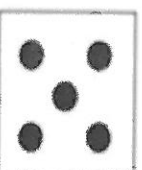
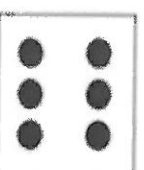
- ***ROLL THE DICE TO DETERMINE THE COORDINATE POINT FOR THE TIP OF YOUR ARROW.***

***DESIGNATE ONE DIE FOR THE X-COORDINATE
AND THE OTHER AS THE Y-COORDINATE***

- ***YOUR ARROW CAN BE PLACED HORIZONTALLY OR VERTICALLY FROM THE POINT***
- ***TRACE YOUR ARROW ON THE COORDINATE PLANE IN BLACK***


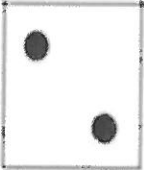
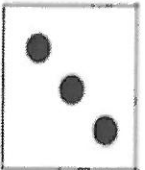
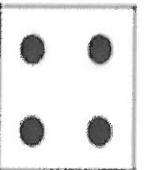
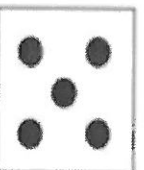
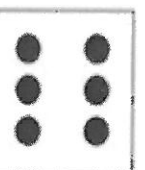
RED RULES

COMPLETE THE TRANSFORMATION WITH YOUR ARROW
TRACE THE ARROW IN RED

					
REFLECT OVER THE X-AXIS	ROTATE 90 DEGREES CLOCKWISE AROUND THE TIP OF THE ARROW	ROTATE COUNTER- CLOCKWISE 180 DEGREES AROUND THE ORIGIN	REFLECT OVER THE Y-AXIS	TRANSLATE 4 UNITS RIGHT AND 3 UNITS DOWN	TRANSLATE 5 UNITS LEFT AND UP 2 UNITS


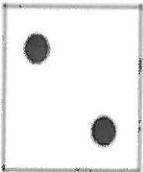
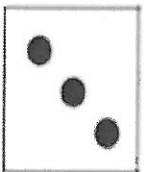
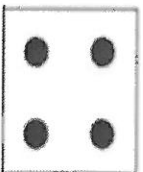
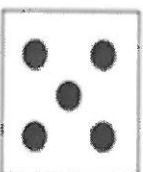
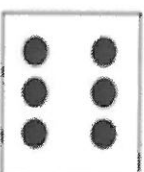
ORANGE RULES

COMPLETE THE TRANSFORMATION WITH YOUR ARROW
TRACE THE ARROW IN ORANGE

					
TRANSLATE 4 UNITS DOWN	TRANSLATE 5 UNITS RIGHT	ROTATE COUNTER- CLOCKWISE 90 DEGREES AROUND THE TIP	REFLECT OVER THE HORIZONTAL AXIS	ROTATE YOUR ARROW 270 DEGREES CLOCKWISE	REFLECT OVER THE VERTICAL AXIS


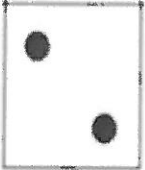
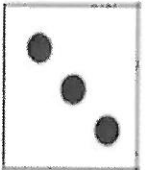
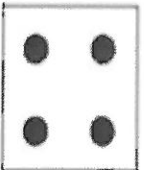
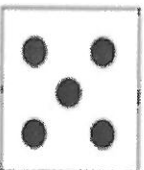
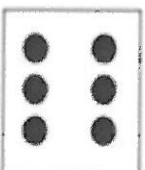
YELLOW RULES

COMPLETE THE TRANSFORMATION WITH YOUR ARROW
TRACE THE ARROW IN YELLOW

					
TRANSLATE (X+2), (Y-1)	ROTATE 450 DEGREES CLOCKWISE AROUND THE TIP OF THE ARROW	REFLECT OVER THE Y AND TRANSLATE 2 UNITS TO THE LEFT	TRANSLATE (X-3, Y-3)	ROTATE 180 DEGREES AROUND THE TIP OF THE ARROW	REFLECT OVER THE X AND TRANSLATE 2 UNITS DOWN


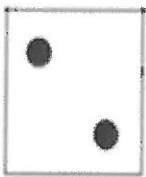
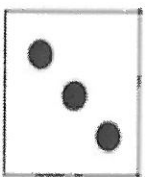
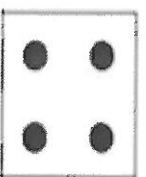
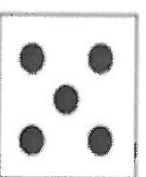
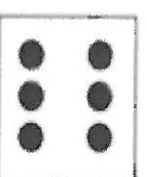
GREEN RULES

***COMPLETE THE TRANSFORMATION WITH YOUR ARROW
TRACE THE ARROW IN GREEN***

					
TRANSLATE (X, Y+5)	TRANSLATE (X-2, Y)	TRANSLATE (X-5, Y+4)	TRANSLATE (X-1, Y+7)	TRANSLATE (X+3, Y-6)	TRANSLATE (X+1, Y+1)


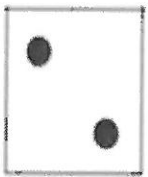
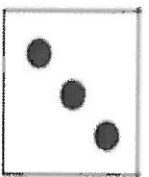
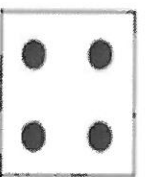
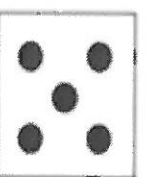
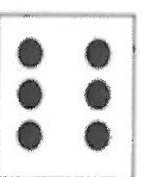
BLUE RULES

***COMPLETE THE TRANSFORMATION WITH YOUR ARROW
TRACE THE ARROW IN BLUE***

					
ROTATE 90 DEGREES AROUND THE ORIGIN COUNTER- CLOCKWISE	ROTATE 180 DEGREES AROUND THE ORIGIN	ROTATE 270 DEGREES AROUND THE ORIGIN CLOCKWISE	ROTATE 450 DEGREES AROUND THE ORIGIN COUNTER- CLOCKWISE	ROTATE 630 DEGREES AROUND THE ORIGIN CLOCKWISE	ROTATE 540 DEGREES AROUND THE ORIGIN COUNTER- CLOCKWISE

PURPLE RULES

***COMPLETE THE TRANSFORMATION WITH YOUR ARROW
TRACE THE ARROW IN PURPLE***

					
REFLECT OVER THE X-AXIS AND TRANSLATE 4 UNITS RIGHT AND TWO UNITS DOWN	REFLECT OVER THE X-AXIS	REFLECT OVER THE X-AXIS AND TRANSLATE 2 UNITS RIGHT AND 3 UNITS UP	REFLECT OVER THE Y-AXIS	REFLECT OVER THE Y-AXIS AND TRANSLATE 1 UNIT DOWN	REFLECT OVER THE Y-AXIS AND MOVE 5 UNITS LEFT

Name _____



COLOR	ROLL	RULE	COORDINATE OF ARROW POINT	DIRECTION ARROW IS POINTING
BLACK				
RED				
ORANGE				
YELLOW				
GREEN				
BLUE				
PURPLE				

